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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Operational Test and Evaluation, Defense									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605131OTE: Live Fire Test and Evaluation							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	11.541	12.234	12.899	0.000	12.899	13.661	13.996	14.339	14.691	Continuing	Continuing
2: LFT&E	11.541	12.234	12.899	0.000	12.899	13.661	13.996	14.339	14.691	Continuing	Continuing

A. Mission Description and Budget Item Justification

This Program Element (PE) directly supports the Congressional statutory requirements for oversight of Live Fire Test and Evaluation (LFT&E). The primary objective of LFT&E is to assure that the vulnerability and survivability of Department of Defense (DoD) crew-carrying platforms and the lethality of our conventional munitions are known and acceptable before entering full-rate production. LFT&E encompasses realistic tests involving actual United States (U.S.) and foreign threat hardware or, if not available, acceptable surrogate threat hardware. The objective is to identify and correct design deficiencies early in the development process. A completed LFT&E program and test report is required before programs proceed beyond low-rate initial production (BLRIP). LFT&E also includes realistic modeling and simulation (M&S) to examine survivability and lethality attributes not assessed during testing. The LFT&E program is essential, especially in view of the escalating costs of technologically sophisticated weapons systems.

This program element also supports DoD’s Joint Live Fire (JLF) Program and other LFT&E related initiatives. JLF was begun in 1984 under an Office of the Secretary of Defense (OSD) charter to test fielded front-line combat aircraft and armor systems for their vulnerabilities as well as fielded weapons, both U.S. and foreign, for their lethalties against their respective targets. Funds are also used to support other initiatives related to quick reaction requests from theater and other areas of personnel survivability.

This program element includes funds to obtain Federally Funded Research and Development Center (FFRDC) expertise in performing analyses in support of described tasks, as well as travel funds to carry out the LFT&E program.

This program element is budgeted in Budget Activity 6, RDT&E Management Support, to support LFT&E management activities for the oversight of RDT&E of new systems, as well as RDT&E of fielded systems.

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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
0460: Operational Test and Evaluation, Defense		PE 0605131OTE: Live Fire Test and Evaluation			
BA 6: RDT&E Management Support					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	11.541	12.285	0.000	0.000	0.000
Current President's Budget	11.541	12.234	12.899	0.000	12.899
Total Adjustments	0.000	-0.051	12.899	0.000	12.899
• Congressional General Reductions		-0.051			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Program Adjustment	0.000	0.000	12.899	0.000	12.899

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Operational Test and Evaluation, Defense									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 0460: Operational Test and Evaluation, Defense BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605131OTE: Live Fire Test and Evaluation				PROJECT 2: LFT&E			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
2: LFT&E	11.541	12.234	12.899	0.000	12.899	13.661	13.996	14.339	14.691	Continuing	Continuing
Quantity of RDT&E Articles											
A. Mission Description and Budget Item Justification											
<p>This Program Element (PE) directly supports the Congressional statutory requirements for oversight of Live Fire Test and Evaluation (LFT&E). The primary objective of LFT&E is to assure that the vulnerability and survivability of Department of Defense (DoD) crew-carrying platforms and the lethality of our conventional munitions are known and acceptable before entering full-rate production. LFT&E encompasses realistic tests involving actual United States (U.S.) and foreign threat hardware or, if not available, acceptable surrogate threat hardware. The objective is to identify and correct design deficiencies early in the development process. A completed LFT&E program and test report is required before programs proceed beyond low-rate initial production (BLRIP). LFT&E also includes realistic modeling and simulation (M&S) to examine survivability and lethality attributes not assessed during testing. The LFT&E program is essential, especially in view of the escalating costs of technologically sophisticated weapons systems.</p> <p>This program element also supports DoD’s Joint Live Fire (JLF) Program and other LFT&E related initiatives. JLF was begun in 1984 under an Office of the Secretary of Defense (OSD) charter to test fielded front-line combat aircraft and armor systems for their vulnerabilities as well as fielded weapons, both U.S. and foreign, for their lethalties against their respective targets. Funds are also used to support other initiatives related to quick reaction requests from theater and other areas of personnel survivability.</p> <p>This program element includes funds to obtain Federally Funded Research and Development Center (FFRDC) expertise in performing analyses in support of described tasks, as well as travel funds to carry out the LFT&E program.</p> <p>This program element is budgeted in Budget Activity 6, RDT&E Management Support, to support LFT&E management activities for the oversight of RDT&E of new systems, as well as RDT&E of fielded systems.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total						
Live Fire Test and Evaluation	11.541	12.234	12.899	0.000	12.899						

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i> Major Test and Evaluation Programs</p> <p>The FY 2009 budget provided Live Fire Test and Evaluation input for Test and Evaluation Master Plans, Test Plans, System Acquisition Reports, Defense Acquisition Executive Summary reports, and BLRIP reports for those programs designated for oversight by DOT&E and OUSD(AT&L). The oversight list is developed and approved annually.</p> <p>JLF Programs and LFT&E Initiatives</p> <p>Conducted tests of fielded systems not previously tested under Air, Land, or Sea Joint Live Fire programs to support DOT&E and warfighter needs. The need for these tests result from systems being exposed to new threats, used in new unanticipated tactics, or being operated in new combat environments, and the subsequent need for an assessment of their performance. Continued to support and partner with the Joint Improvised Explosive Device Defeat Organization (JIEDDO). Addressed urgent requests that directly support deployed warfighters and issues of importance to the Congress in the areas of personnel body armor and combat helmets. Supported congressionally requested study on rotorcraft survivability and follow on efforts of the Department to focus near-term initiatives in support of the warfighter. An initiative was began to investigate aortic injuries in partnership with OUSD (Personnel and Readiness) and NASA as part of Occupant Casualty initiatives.</p> <p>Continued to perform JLF projects to provide survivability data on currently fielded U.S. systems. JLF Air projects investigated vulnerabilities of H-60 aircraft, generic vulnerabilities to all aircraft, such as fuel ingestion and vulnerability of carried munitions, vulnerabilities of advanced aircraft materials, and MANPADS related vulnerabilities. JLF Land projects investigated the vulnerability of vehicles to blast, and the lethality of U.S. weapons against typical in-theater targets, as well as improving modeling and simulation tools by providing validation data. JLF Sea projects continued to develop key</p>						

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
components of alternatives to traditional shock trials of ships and submarines and began to investigate ship vulnerabilities in the areas of commercial standards, equipment damage, and compartment fires.						
FY 2010 Plans: Major Test and Evaluation Programs						
This is a continuing effort. The FY 2010 budget provides Live Fire Test and Evaluation input for Test and Evaluation Master Plans, Test Plans, System Acquisition Reports, Defense Acquisition Executive Summary reports, and BLRIP reports for those programs designated for oversight by DOT&E and OUSD(AT&L). The oversight list is developed and approved annually.						
JLF Programs and LFT&E Initiatives						
Conduct tests of fielded systems not previously tested under Air, Land, or Sea Joint Live Fire programs to support DOT&E and warfighter needs. The need for these tests result from systems being exposed to new threats, used in new unanticipated tactics, or being operated in new combat environments, and the subsequent need for an assessment of their performance. As necessary, continue to support and partner with the JIEDDO. Continue efforts in support of Personnel Protection Equipment, including combat helmets and body armor. Continue interagency effort with NASA investigating aortic injuries, especially as seen in ground and air vehicle incidents. Address urgent requests that directly support deployed warfighters and issues of importance to the Congress as they arise.						
Continue to perform JLF projects to provide survivability data on currently fielded U.S. systems. JLF Air projects will continue to investigate vulnerabilities of AH-64, CH-46, H-60, and KC-130 aircraft, generic vulnerabilities to all aircraft, such as to MANPADS, and vulnerabilities of advanced aircraft materials. JLF Land projects will continue to investigate the vulnerability of vehicles to blast, especially from IEDs, and the lethality of U.S. weapons against typical in-theater targets, as well as						

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p>improving modeling and simulation tools by providing validation data. JLF Sea projects will continue to develop key components of alternatives to traditional shock trials of ships and submarines, will begin to investigate ship vulnerabilities in the areas of commercial standards, equipment damage, and compartment fires, and will investigate vulnerabilities of designs and components for new ships.</p> <p><i>FY 2011 Base Plans:</i> Major Test and Evaluation Programs</p> <p>This is a continuing effort. The FY 2011 budget provides Live Fire Test and Evaluation input for Test and Evaluation Master Plans, Test Plans, System Acquisition Reports, Defense Acquisition Executive Summary reports, and BLRIP reports for those programs designated for oversight by DOT&E and OUSD(AT&L). The oversight list is developed and approved annually.</p> <p>JLF Programs</p> <p>Conduct tests of fielded systems not previously tested under Air, Land, or Sea Joint Live Fire programs to support DOT&E and warfighter needs. The need for these tests result from systems being exposed to new threats, used in new unanticipated tactics, or being operated in new combat environments, and the subsequent need for an assessment of their performance. As necessary continue to support and partner with the JIEDDO. Continue initiatives with crew survivability. Address urgent requests that directly support deployed warfighters and issues of importance to the Congress.</p>						
Accomplishments/Planned Programs Subtotals		11.541	12.234	12.899	0.000	12.899
C. Other Program Funding Summary (\$ in Millions) N/A						
D. Acquisition Strategy N/A						

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<p>E. Performance Metrics</p> <p>Performance Measure: Percentage of required live fire test planning documents, assessments, and reports applicable to acquisition programs on the OSD Test and Evaluation Oversight List and other special interest programs/legacy systems that are completed and delivered to the appropriate decision makers on time. Percentage of required live fire test planning documents, assessments, and reports applicable to acquisition programs on the OSD Test and Evaluation Oversight List and other special interest programs/legacy systems that are completed and delivered to the appropriate decision makers on time.</p> <p>Actual Performance and Goals:</p> <p>Live Fire Testing</p> <table> <tr> <td>FY 2009</td> <td>FY 2010</td> <td>FY 2011</td> </tr> <tr> <td>Actual</td> <td>Goal</td> <td>Goal</td> </tr> <tr> <td>96%</td> <td>97%</td> <td>98% (On-Time Completion Rate)</td> </tr> </table> <p>The on-time completion rate was computed on the basis of the number of beyond low-rate initial production live fire test and evaluation reports, Joint Live Fire Quick Look Reports, and Joint Live Fire Test reports that were submitted within established time standards relative to the total number of such products that fell due during the fiscal year. DOT&E plans to achieve its goals for FY 2010 and FY 2011 through continued management emphasis on timely delivery of required reports to customer activities.</p>			FY 2009	FY 2010	FY 2011	Actual	Goal	Goal	96%	97%	98% (On-Time Completion Rate)
FY 2009	FY 2010	FY 2011									
Actual	Goal	Goal									
96%	97%	98% (On-Time Completion Rate)									

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